

What is claimed is:

1. A radiation image storage panel comprising a
5 phosphor layer produced by a vapor phase deposition method, wherein the phosphor layer comprises an europium activated cesium halide stimulable phosphor and exhibits an ultraviolet light-excited emission spectrum satisfying the condition of:

10

$$0 < S(400-420) < 0.20$$

in which $S(400-420)$ represents a ratio of an amount of a light emitted by a luminous component giving an emission
15 peak in the region of 400 to 420 nm based on the total amount of emitted light.

2. The radiation image storage panel of claim 1,
in which the europium activated cesium halide stimulable
20 phosphor is represented by the following formula (I):



in which M^{I} is at least one alkali metal element selected
25 from the group consisting of Li, Na, K and Rb; M^{II} is at least one alkaline earth metal element or divalent metal element selected from the group consisting of Be, Mg, Ca, Sr, Ba, Ni, Cu, Zn and Cd; M^{III} is at least one rare earth element or trivalent metal element selected from the
30 group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Al, Ga and In; each of X, X', X'' and X''' is independently at least one halogen selected from the group consisting of F, Cl, Br and I; and a, b, c and z are numbers satisfying the conditions of
35 $0 \leq a < 0.5$, $0 \leq b < 0.5$, $0 \leq c < 0.5$ and $0 < z < 1.0$, respectively.

3. The radiation image storage panel of claim 2,
in which X in the formula (I) is Br.

4. The radiation image storage panel of claim 1,
5 in which the phosphor layer exhibits an ultraviolet
light-excited emission spectrum satisfying the condition
of $0.01 < S(400-420) < 0.20$.